

# STROBOSCOPE

PCE-DSX 15



- » **Doubling/dividing the FPM by pressing a button**
- » **Light source 12 white LEDs**
- » **Flash duration adjustable as duty cycle (%) or time ( $\mu$ s)**
- » **1.6 inch LCD display**
- » **No lamp replacement required**
- » **Quick one-handed operation**
- » **Automatic switch-off**
- » **Power supply: 1.5V AA batteries**

A stroboscope is used wherever fast movements need to be visualized or speeds need to be measured without contact. Typical applications include the inspection of rotating machines, motors, conveyor belts or other vibrating and moving objects. The portable stroboscope is particularly practical for outdoor use or mobile applications.

Thanks to the variably adjustable flash frequency, movements can be precisely observed both at slow and very fast speeds. The flash duration can be flexibly adjusted so that the target object is evenly and brightly illuminated. Powerful LEDs are used as the light source, which ensure high brightness with a short flash duration and do not require a lamp change.

Operation is particularly user-friendly: the flash frequency can be fine-tuned using a rotary knob and can also be multiplied or divided at the touch of a button. The flash duration and brightness can also be easily adjusted. Power is conveniently supplied by batteries, and as there is no noise during the flash, the stroboscope is also suitable for use in quiet working environments.

The functional principle is based on fast flashes of light being directed at a rotating or vibrating object. If this appears optically stationary, the flash frequency matches the actual movement or part of it. This allows the speed to be determined without contact.

## Specification

### Frequency

Measurement range up to 30 ... 120000 FPM

Resolution 0,1 FPM

Accuracy  $\pm 0.01\%$

### Frequency

Measurement range up to 120000 ... 240000 FPM

Resolution 0,1 FPM

Accuracy  $\pm 0.02\%$

### Frequency

Measurement range up to 240000 ... 360000 FPM

Resolution 0,1 FPM

Accuracy  $\pm 0.03\%$

### Frequency

Measurement range up to 0,5 ... 6000 Hz

Resolution 0,1 Hz

Accuracy 0,5 ... 2000 ( $\pm 0.01\%$ ) 2000 ... 4000 ( $\pm 0.02\%$ ) 4000 ... 6000 ( $\pm 0.03\%$ )

### General technical data

Display type LCD with backlight

Display size 1,6 Inch

Operating time 2 h

Operating time additional information at 6000 FPM and 1% pulse duration

Automatic power-off from...to 1 ... 10 min.

Automatic power-off can be deactivated Yes

Luminous intensity 5400 lux @ 20 cm @ 1000 Hz 1%  
2600 lux @ 30 cm @ 1000 Hz 1%  
1050 lux @ 50 cm @ 1000 Hz 1%

Pulse width 0.1 ... 1% of pulse duration  
Resolution: 0.1 %  
0.1 ... 3.7  $\mu$ s of pulse duration  
Resolution: 0.1  $\mu$ s

Menu language English, English (GB)

Protection class (device) IP20

(Rechargeable) battery 2 x 1,5 V AA battery , Alkali-manganese

Capacity 3000 mAh

Operating conditions 0 ... 40 °C , 30 ... 90 % RH

Storage conditions 0 ... 50 °C , 10 ... 90 % RH

Dimensions ( L x W x H ) 135 x 76 x 39 mm

Weight 224 g